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A criterion for unitary congruence between complex matrices

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Abstract

Let A and B be square complex matrices of the same order n. Based on an important result Y. P. Hong and R. A. Horn, we propose a criterion for verifying unitary congruence of these matrices. The criterion requires that a finite number of arithmetic operations be performed. No criteria with this finiteness property were previously known. Bibliography: 7 titles. © 2012 Springer Science+Business Media, Inc.

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